

IN THE CLAIMS:

Please amend the claims as shown below. The status of the claims after amendment will be as follows:

1. (currently amended) A solder ball assembly for use in the formation of solder bumps comprising a heat-resisting sheet having a plurality of holes and comprising first and second heat-resisting layers, a solder ball disposed in each hole, and an adherent layer disposed within the sheet sandwiched between the first and second heat-resisting layers and ~~the adherent layer~~ being exposed to the interior of each hole in such a manner that the adherent layer contacts and holds the solder ball in the hole, and a covering sheet spaced from the adherent layer and placed atop the heat-resisting sheet to cover the solder balls disposed in the holes.

2. (original) A solder ball assembly as claimed in claim 1 wherein the heat-resisting sheet comprises a material selected from the group consisting of resins, metals, ceramics, paper, and combinations of two or more of these materials.

3. (original) A solder ball assembly as claimed in claim 1 wherein the adherent layer is exposed to the interior of each hole on a wall of the hole.

4. (original) A solder ball assembly as claimed in claim 1

wherein each hole has a bottom surface and the adherent layer is exposed to the interior of the hole on the bottom surface of the hole.

5. (original) A solder ball assembly as claimed in claim 1 wherein each hole is straight and has a wall extending perpendicularly to a surface of the heat-resisting sheet.

6. (original) A solder ball assembly as claimed in claim 1 wherein each hole is tapered and has a diameter which gradually decreases toward a bottom of the hole.

7. (original) A solder ball assembly as claimed in claim 1 wherein each hole is a blind hole.

8. (original) A solder ball assembly as claimed in claim 7 wherein the depth of each blind hole is at least one third the diameter but smaller than the diameter of the solder ball disposed therein.

9. (original) A solder ball assembly as claimed in claim 7 wherein the depth of each blind hole is at least one half the diameter but smaller than the diameter of the solder ball disposed therein.

Claims 10 - 17 (cancelled)

18. (currently amended) A method for forming solder bumps on electrodes of a substrate comprising placing a solder ball assembly as claimed in claim 1 with the covering sheet removed from the heat-resisting sheet upside down on a substrate having a plurality of electrodes with each electrode aligned with one of the holes in the solder ball assembly, heating the substrate and the solder ball assembly to melt the solder balls and transform them within the holes in the solder ball assembly into solder bumps attached to the electrodes, and removing the heat-resisting sheet of the solder ball assembly from the substrate.

Claims 19 - 20 (cancelled)

21. (previously presented) A solder ball assembly as claimed in claim 1 wherein the adherent layer extends between adjoining holes inside the heat-resisting sheet.

22. (currently amended) A solder ball assembly as claimed in claim 1 wherein the adherent layer comprises a sheet of an adhesive material formed separately from the first and second heat-resisting layers.

23. (currently amended) A solder ball assembly as claimed in claim 1 wherein the adherent layer prevents the solder balls from falling out of the holes when the covering sheet is removed from the heat-resisting sheet and the assembly is oriented such that the solder balls would fall out of the holes in the absence

of the adherent layer.

24. (currently amended) A solder balls assembly as claimed in claim ~~10~~ 1 wherein each solder ball protrudes from the heat-resisting sheet and the covering sheet conforms to the shape of the protruding portions of the solder balls.

Claims 25 - 26 (cancelled)

27. (new) A solder ball assembly as claimed in claim 1 wherein the covering sheet directly contacts the solder balls.

28. (new) A solder ball assembly for use in the formation of solder bumps comprising a heat-resisting sheet having a plurality of holes formed therein and having a first side facing upwards and a second side facing downwards and comprising first and second heat-resisting layers, each hole opening onto the second side of the heat-resisting sheet, a solder ball disposed in each hole and protruding from the hole at the second side of the heat-resisting sheet, and an adherent layer sandwiched between the first and second heat-resisting sheets and spaced from the second side of the heat-resisting sheet and exposed to the interior of each hole in such a manner that the adherent layer contacts and holds the solder ball in the hole.

29. (new) A solder ball assembly for use in the formation of solder bumps comprising a heat-resisting sheet having a

plurality of holes formed therein and having a first side facing upwards and a second side facing downwards and comprising first and second heat-resisting layers, each hole opening onto the second side of the heat-resisting sheet, a solder ball disposed in each hole, and an adherent layer sandwiched between the first and second heat-resisting sheets and spaced from the second side of the heat-resisting sheet and exposed to the interior of each hole and contacting and holding the solder ball in the hole and supporting the entire weight of the solder ball.